THE SCIENTIFIC AMERICAN.

THE ADVOCATE OF INDUSTRY AND ENTERPRISE, AND JOURNAL OF MECHANICAL AND OTHER IMPROVEMENTS.

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THE
SCIENTIFIC AMERICAN,
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RUFUS PORTER,—Editor.

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A Chapter on Fools.

The Doctor oft said, that for his part, he thought
Folks were not much the better for wisdom men taught;
And that many a fancy sagacity-monger,
Forced to *live* on his wisdom, would soon die of hunger.

That it cannot be wisdom in little or great,
Who ruin themselves, or who ruin the state;
There are fools in their pride, and fools in their purse,
And fools without either that oft are much worse.

There are fools of pretension and fools of pretence,
Fools that can't understand other folk' sense;
There are high finished boobies, from every great school,
And many worse fools in the world than "Tom Fool;"

There are fools all for saving, and fools that all spend,
And great fools that borrow, and greater that lend—
Fool's that rush into crime to accumulate wealth,
Fools that squander the best of all treasures, their health.

Fools that barter the best things of life for a song,
Fools of lovers, whose folly but seldom lasts long;
There are fools that are single and fools that are wed,
And fools have writ volumes that never were read.

There are fools, too, that read, and are never the wiser,
And many's the fool takes the part of adviser;
There are fools to be woo'd, and still greater to woo—
And fools to give roguery plenty to do.

There are fools that abuse, and fools that applaud;
Great fools stay at home, and great fools go abroad,
And great fools return greater fools than they went,
Their morals all gone and their money all spent.

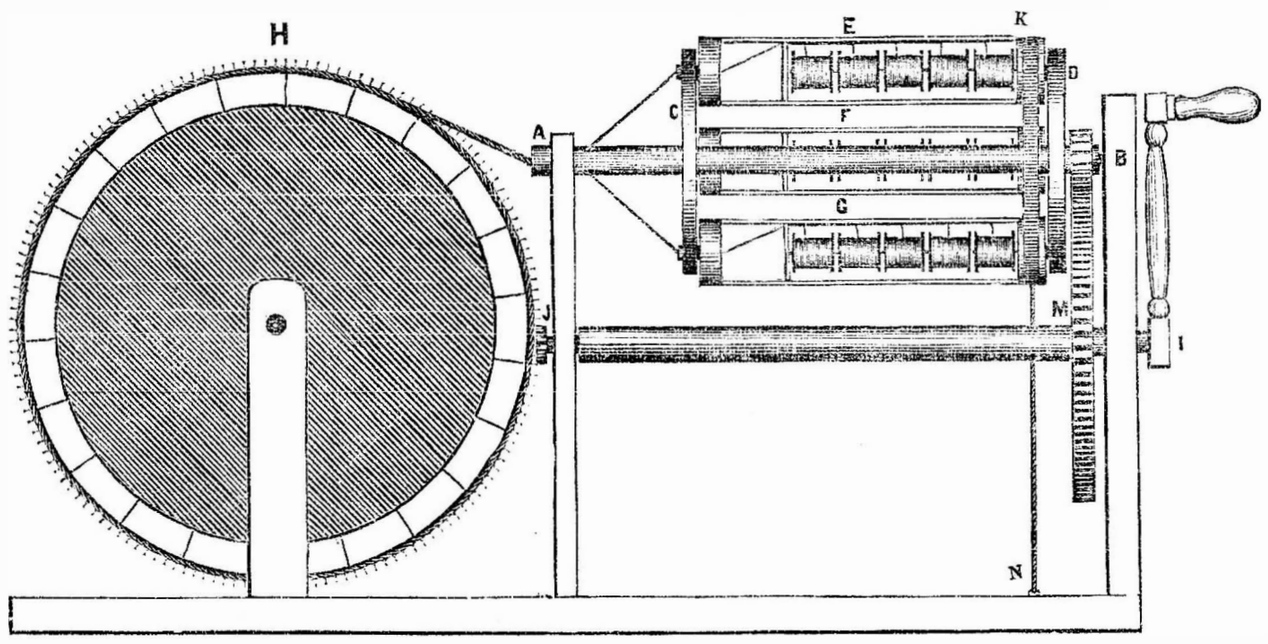
There are fools that see diamonds in Derbyshire spar,
And these are *the* fools found at every bazaar;
Fools to be stared at, and fools, too, to stare,
And mothers, great fools, let their daughters be there.

There are fools in the city of pleasure and trade,
There are fools country gentlemen all ready-made;
Great fools of great fortunes lose life and estate,
For the hunting a fox aed the leaping a gate.

There are fools that are young, and fools that grow old;
Some fools are too gentle—some given to scold;
Some fools that torment friends, children and wives,
And greater that plague themselves out of their lives.

I could tell of more fools, without number or end—
That with all this my telling I never shall mend;
And perhaps lose myself, both my sense and my labor,
And perhaps—'I am quite as great fool as my neighbor.'

CORD-MAKING MACHINE.



INTRODUCTION.—The ordinary method, and which is most generally practised in the manufacture of small as well as large cordage, is to draw off from from spools or bobbins the requisite number of threads or yarns, and extend them several hundred feet horizontally in what is called a *line walk;* and then twist several yarns together, to form the twists or strands, by very simple machinery, and twist three of these strands together in a contrary direction to complete the cord. But by the machine here introduced, the yarn is taken from the spools,—nine, twelve, or fifteen in number,—formed into three twists or strands, and these are counter-twisted into finished cord, and reeled upon a drum, all at one operation, and the process requires no more space than a small table. We are not aware that more than one machine of this kind has been put in operation; but in consideration that small cotton and linen cord, and three corded twine, are in extensive use; that the machines are easily constructed, and that there are in this city several hundreds of children who might be profitably employed in this business, we have been induced to present a description, with the assurance that the invention is free for all who may choose to avail themselves thereof.

EXPLANATION.—On a horizontal shaft, A B, fifteen inches long and one inch in diameter, is mounted two wheels, C D, five inches in diameter, and these wheels constitute the bearings of three fliers, E F G. These fliers are mounted at equal distances from each other, the bearings thereof forming a triangle; each flier consisting of two small cylinder-heads, connected by two opposite segments. and containing five small spools mounted on a central axle which extends from the first cylinder-head to a cross-bar, near the opposite end of the flier. Each of these spools contains a quantity of thread or yarn, which, when in operation, is drawn off from the spool, passing over a small metallic hook attached to the inside of one of the segments, and thence through the cross-bar and hollow centre of the pivot of the flier, and thence to and through the centre of the pivot or gudgeon of the shaft at A, and thence to the periphery of the drum, H, which being three feet in circumference, measures the cord as it is coiled thereon. This machine is put in motion by means of a crank attached to the shaft, I J. A goer-wheel, M, takes to a pinion on the flier-shaft, while a small pinion, J, on the extreme end of the crank shaft, takes to a series of teeth or pins, projecting from the periphery of the drum, thereby giving to the drum a motion sufficient to take off the cord as fast as it is sufficiently twisted by the flier-shaft. A belt, K, extends round the three first cylinder-heads of the fliers; and this belt being held stationary by a cord which extends therefrom to the floor of the machine, at N, it causes the fliers to revolve rapidly in the direction contrary to that of the flier-shaft. Thus it will be readily seen that this motion of the fliers on their respective pivots, twists each five threads into a strand, while the motion of the flier shaft lays and twists the three strands together in the opposite direction at the point A. A single machine will make three yards of cord per minute, or about 150 yards per hour; and the ordinary difference between the cost of the stock and the wholesale price of the cord, is ten cents per hundred yards; thus affording a profit of one dollar and fifty cents on ten hours' work of the machine. Several parallel setts of shafts and fliers may be arranged to be driven by one crank, so as to make several cords at the same time, and wind them upon the same drum: but for the use of children, the single machines should be preferred. The single machines may be made for ten dollars each.

FEATS OF EAST INDIA JUGGLERS.—Martin, describes many of the feats of the jugglers of the East, which were performed in his presence, but which were more astonishing and incredible than anything exhibited in this country. One produced a plain, brown, earth jar, which was frequently filled with water, and on being reversed, no water flowed from it, and it proved to be empty. The audience were invited to fill the jar, which they did many times, but with the same results, although the ground was not wet, nor was there the least appearance of water, when the jar was overturned or reversed. The jar was examined, and by permission, broken to pieces by the people present, but nothing peculiar was discovered about it. A man appeared with a bag of brass balls, which he threw one by one into the air, to the number of thirty-five. None of them appeared to return. After waiting a while, he made some odd motions with his hands, and the balls were seen to fall, one at a time, till he had caught the whole thirty-five, and returned them to the bag. This feat was repeated several times. Another person appeared with a bamboo about twenty feet long; and with a girdle round his body, in which was an iron socket. He placed the end of the bamboo pole on a flat stone, and climbed nimbly to the top of it, and fixed the socket of his breast-plate on its top end: and then, turning his legs backward till his heels touched his shoulders, grasped his ancles with his hands, and spun round with such velocity, as to appear like a revolving ball, while the pole, on the top of which he was whirling, had no apparent support whatever, to prevent its falling.

THE WHORTLEBERRY.—The swamp whortleberry is capable of successful introduction into garden culture. A gentleman in Wayne county, Michigan, has a little whortleberry tree growing in his garden which was transplanted from a marsh about ten years ago. It is about ten feet high, and about an inch and a half in diameter at the root. It stands in a rich sandy upland soil. The fruit is improved in size and is equal in flavor to that produced in the swamps. The yield is said to be more abundant and more certain. The tree is watered daily in very dry weather, and perhaps might not do well without it. If efforts to cultivate in a dry soil be not successful, a more moist one might be tried. The smaller variety, growing on the openings might be tried. They probably would flourish as well with the same treatment, as currant bushes, and surely this delicious fruit is worth rescuing from the extinction that seems to await it; for it is much more palatable than the currant, and requires less sweetening.

On the sides of Mount Etna are about 77 cities towns and villages, containing 15,000 inhabitants.

BLISTERS *vs.* FLOGGING.—We are informed by Sir C. Napier that blistering was successfully tried as a substitute for flogging in two corps, and he is not aware that this mode of punishment was adopted in any other regiment. The commanding officer of one of the regiments in question, that stationed in Guernsey, where liquor is cheap, determined to try to put a stop to the crime of drunkenness on duty, by an appeal to the honorable feelings of soldiers, and, at the same time, to make drunkenness as unpleasant as possible, but without the lash. He gave out an order to say that he would not flog, but trust to the soldier's self-respect for keeping sober on duty. Next day a man was drunk and confined. The colonel, accompanied by the surgeon, went to the guard-house and felt the drunkard's pulse. He was declared to be in a fever. Nothing could be more true. He was therefore put into a blanket, and four soldiers bore him through the barracks, his comrades all laughing at the care taken of him. On reaching the hospital, the patient was put to bed and *blistered* between the shoulders, fed on bread and water for a week, and then discharged cured. He was then brought on the parade, when the commanding officer congratulated him on his recovery, and sent him to join his company, when he was laughed at and jeered by his comrades during the space of a week. Many others underwent the same treatment; but the joke, though very amusing to the sober soldiers, soon began to be none to the drunkards. There was considerable pain and uneasiness—some bread, plenty of water; but no pitying comrades—no commisseration—no mercy. The experiment was completely successful. Not a man of that regiment was flogged in Guersey from the time the men were treated with blisters; and a fortnight after, there was no such thing as a man drunk on guard or parade. Now, this regiment had been in an infamous state.

A FACT IN PORCELAIN MANUFACTURE—At a recent meeting of the Society of Arts in London, during an examination of several fine specimens of vases, milk-ewers, water-jugs, &c. constructed after antique patterns, an interesting explanation was given on the manufacture of articles of the same form, but different size. It was stated that no matter how many sizes of any given article are required, the largest alone is modelled, which, on being exposed to the action of the fire, sinks in the proportion of one-sixth of its bulk, and becomes the mould on which a second is formed. The produce of this is again diminished in a similar degree in the course of the process, and by their means a series of any extent can be obtained without any additional call on the labor of the designer.

THE LAKE COUNTRY.—In a few years the trade and commerce of the Lake Country will nearly equal the commerce of the Atlantic. At the present moment it exhibits evinence of gigantic increase It is known that the first steamboat which reached Mackinaw was in 1819, and in 1826 steamboats navigated Lake Michigan. In 1833 there were on the Lakes, eleven steamers, which cost $360,000 and which conveyed to and from the Lake ports 61,485 passengers. In 1834 there were 18 steamboats in the trade which cost $600,000. In 1845 the following vessels navigated the Lakes, above the falls of Niagra:—Steamboats 52, 29,500 tons. Propellers 8, 2,500 tons. Brigs 50, 11,000 tons. Schooners 270, 42,000 tons. Total 380, 76,000 tons. The cost of the construction of these vessels, was $4,600,000. In the same year there were on Lake Ontario 7 steamboats, 8 large propellers and 100 brigs and schooners. The tonnage is estimated at 8000. The navigation of the Lakes is critical and requires great improvements in light houses, beacons, buoys, harbors, &c. During the last five years, more than 400 lives have been lost, and last fall, during the boisterous weather, 60 lives were lost, 36 vessels driven ashore, 20 became total wrecks, four foundered and the loss of property was estimated at $200,000. In 1845, not less than 1,500,000 bbls of flour passed over the Lakes, and 250,000 passengers. At the present time the commerce of the Lakes may be fairly estimated at $100,000,000 per annum. This is in evidence of what commerce will be hereafter, and how necessary it is for the government to foster and protect that trade, in the improve of the harbors and bays.

EFFECT OF SULPHATE OF IRON ON VEGETATION.—The Journal d'Horticulture Pratique asserts that a tree, of which the wood is tender, poor and sickly, to which a strong solution of sulphate of iron should be applied, revives and puts forth an extraordinary vegetation. This dissolution of sulphate, of which M. Paquet has made many successful applications this summer, should be given in and with the water, when the plants or trees are watered, so that the roots may more readily absorb the chemical agencies which reanimate the vital forces of the tree.

TRUE POLICY.—Under all circumstances there is but one honest course: and that is, to do right and trust the consequences of Divine Providence. "Duties are ours; events are God's." Policy, with all her cunning, can devise no rule safe, salutary, and effective, as this simple maxim.

It is supposed that much of the water of the Niagara passes through a subterraneous passage from the whirlpool above the falls, and re-appears some miles below.

A LIST OF PATENTS ISSUED FROM THE 14TH MARCH TO 11TH APRIL, 1846.

(Continued from No. 47.)

To Charles Wheeler, of Lockport, Mass., for improvement in Light House Lamps: patented 11th April, 1846.

To William Kumbel, of New York city, for improvement in stretching leather bands: patented 11th April.

To Thomas J. Wells, of New York city, for improvement in Saw Mills: patentee 11th April.

To Samuel Lowery, of Philadelphia, for improvement in making bricks: patented 18 April.

To George W. Macon, Louisburgh, N. C., for improvement in machinery for smoothing tobacco leaves: patented 18th April.

To Waldren Beach, of Baltimore, for improvement in corn shellers: patented 18th April.

To Joseph Colton, for improvement in pocket books and watch safes: patented 18th April.

To Nathan Ides, of Shelby, N. Y., for improvement in Cultivators: patented 18th April.

To Clinton Foster, of Laporte, Ind., for improvement in reaping machines: patented 18th April.

To C. S. Debow, of New York city, for improvement in extension bedsteads: patented 18th April: ante dated 11th April.

To Royal E. House, of New York city, for improvement in Magnetic Printing Telegraphs: patented 18th April.

To Samuel Witherow, of Gettysburgh, Pa., for improvement in plows: patented 18th April.

To Joshua M. C. Arnisby, of Worcester, Mass., for improvement in regulating the draft of plows, (assigned to Ruggles, Nourse & Mason: patented 18th April.

To Joel W. Andrews, of Norristown, Pa., for improvements in the manner of burning bricks: patented 4th April.

To Isaac K. Jennings, of Tuscaloosa, Ala., for apparatus in the speedy generation and convenient, prompt, and agreeable application of heat to the human system: patented 21st of January, 1814. Renewed and extended by act of Congress, from March 3d, 1843. Issued 4th April, 1846.

To David G. Colburn, of Wilmington, Vt., for improvement in pumps: patented 25th April.

To Joel Hall, 2nd, of Wallingford, Conn., for improvement in casting spoons: patented 25th April.

To Barnabas Langdon and Amos Salisbury, of Troy, N.Y., for improvement in hemp-dressers: patented 25th April.

To William Wheeler, of West Poultney, Vt,, for improvement in currycombs: patented 25th April.

To James Denison, of Laniel, Ohio, for improvement in water-wheels: patented 25th April.

To Henry A. Wells, of New York city, for improvement in machinery for making hat bodies: patented 25th April.

To William Boughton, of London, England, for improvement in grinding-mills: patented 25th April.

To Ralph Summers, of Seneca Falls, N. Y., for improvement in water-wheels: patented 25th April.

To Henry Johnson, of Washington, D. C, for improvement in way-mail bags: patented 25th

To Robert Ferguson and John Clark, of Glasgow, Scotland, for improvement in printing calico: patented 25th April.

To Henry Donges, of Newport, Pa., for improvement in Tailors' measures: pated 25th April.

To Jonathan F. Ostrander, of New York city, for improvement in Grinding-mills: patented 25th April.

To Josiah Warren, of New Harmony, Ind., for improvement in composition for stereotype-plates: patented 25th April.

To Joshua Norton, jr., of Boston, for improvement in the mode of drying sized paper: patented 25th April.

To John Simpson, of Decatur, Ga., for improvement in machines for making brick: patented 25th April.

To Harvey H. May, of Galesburgh, Ill., for improvement in plows: patented 25th April.

To Isaac Kellogg, of New Hartford, Ct., for improvement in making cores for castings, (assigned to Henry Kellogg): patented 25th April.

To Daniel R. Allen, of Cumberland, Me., for improvement in hay-presses: patented 25th April.

To William P. Marston, of Danville, Va., for improvement in making a machine for rolling tobacco: patented 25th April.

To William Y. Singleton, of Springfield, Ill., for improvement in hommony making: patented 25th April.

To Michael Collins, of Boston, for improvement in ventilators for chimneys: patented 25th April.

To John M. May, of Philadelphia, for improvements in plows: patented 2d May.

INGENUITY OF THE CHINESE.—The following descriptions were given by a clergyman who had visited China.

"A hollow ball was shown him, some inches in diameter, which was divided into two hemispheres, the inside of one of which was a representation of heaven, and that of the other of hell. By closely examining the surface with the naked eye, or by drawing his finger gently over it, he could just perceive a slight irregularity—a little roughness—but nothing more. On applying, however, a powerful magnifier, he found one of these hemispheres covered with the forms of angelic beings, all with countenances expressive of the highest happiness; and this was heaven. On the other hemisphere was hell. Each figure was perfect in itself; and the artist had succeeded in depicting the various passions on the countenance, in a wonderful and astonishing manner.

He had also seen a cherry stone, with a part of it taken off, leaving the remainder in the shape of a small bowl, and looking inside and out not unlike any other cherry stone, save what appeared to be a quantity of silver filings in its bottom. On having recourse to his magnifier again, he saw no less than a hundred perfectly formed and beautiful silver teaspoons.

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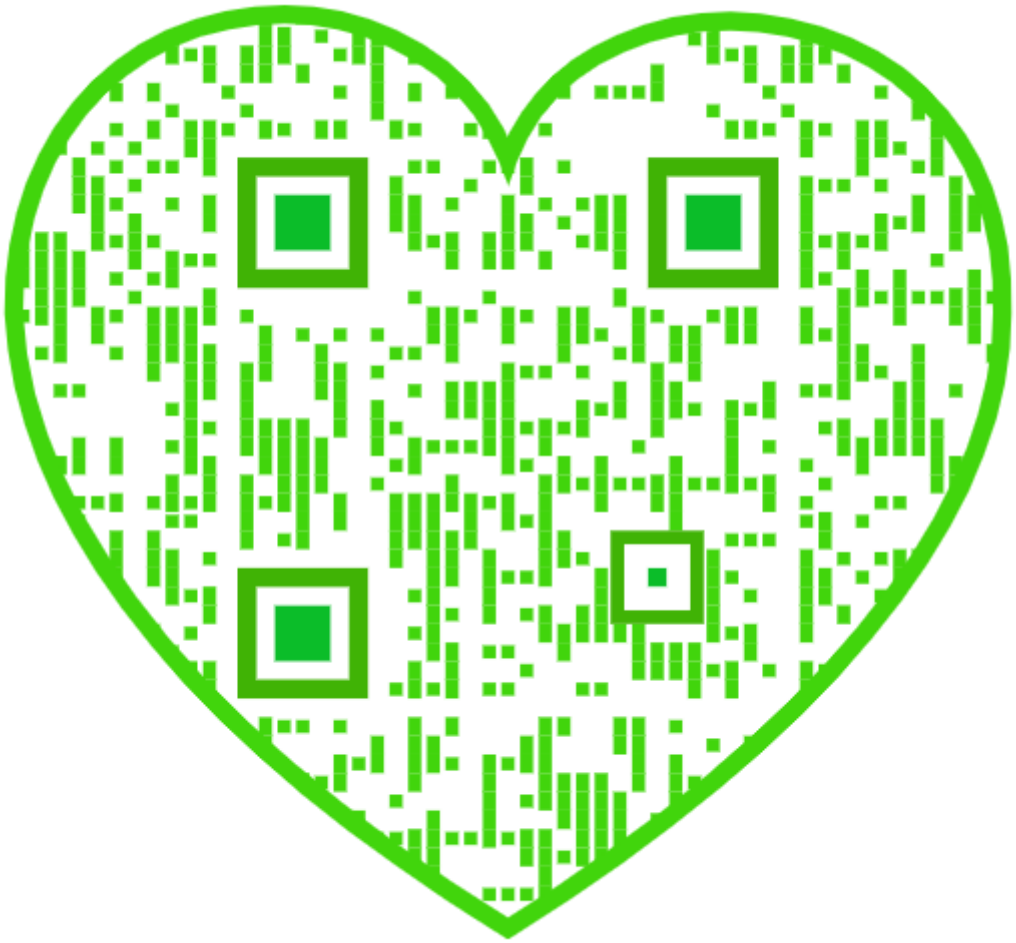
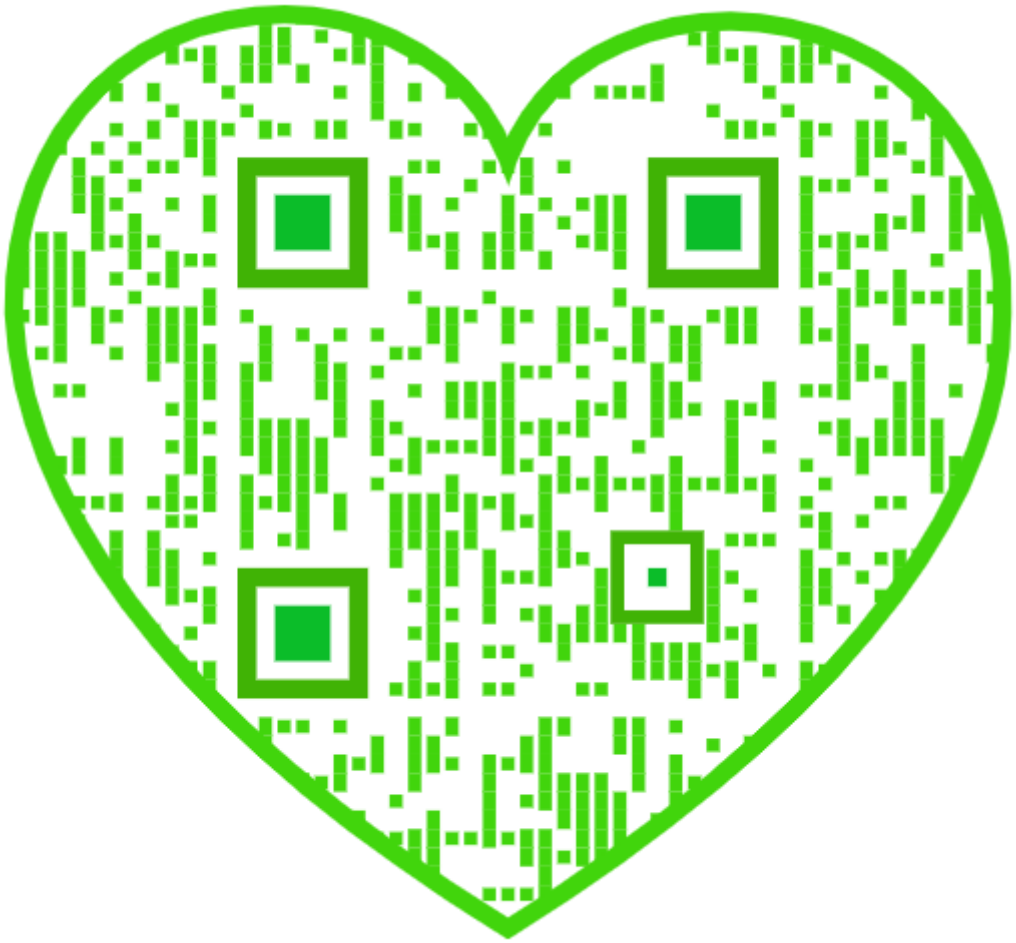




SCIENTIFIC AMERICAN

NEW-YORK, THURSDAY, AUGUST 27.

Drawings of machinery, engraving on wood, and lithographic drawings, neatly executed, at the lowest prices, at this office.

POST MASTERS—Who receive this paper, will confer a special favor by mentioning the subject occasionally to scientific mechanics. The aid, also and influence of all our kind patrons, in extending the notice and circulation of this paper, is most respectfully solicited.

THE MOON.—By means of a magnificent and powerful telescope, procured by Lord Ross, of Ireland, the moon has been subjected to a more critical examination than ever before, and many objects of moderate size have been distinctly seen. But it is stated that there were no signs of inhabitants such as ours—no vestiges of architectural remains to show that the moon is or ever was, inhabited by a race of mortals similar to ourselves. It presented no appearance which could lead to the supposition that it contained anything like the green-field and lovely verdure of this beautiful world of ours. There was no water visible—not a sea, or a river, or even the measure of a reservoir for supplying even one factory—all seemed desolate. Hence would arise the reflection to the mind of the Christian philosopher—why had this devastation been.

FROM THE ARMY.—Gen. Taylor left Matamoras on the 10th inst., on his way to Camargo, accompanied by a part of the Texian regiment of infantry. It is stated in recent accounts from Camargo, that on the 27th of July, a party of Camanches, numbering several hundred, about nine miles from Camargo, killed about thirty Mexicans, and carried off thirteen women and children. The Alcaldo of Guiredo has also been killed, and the authorities of that place have called upon Gen. Worth, the commander of the troops at Camargo, for protection, declaring that they have been abandoned by the Mexican Government, and have nothing to hope from it. It is also rumored that a party of 600 Camanches had been encountered by about 80 American rangers, who killed about twenty of the Indians, and took from them 150 horses. So it seems that an army of invasion has become the army of protection to the Mexicans. It is a very curious sort of a war, all points and parties considered.

SUBMARINE TELEGRAPHS.—A successful experiment has recently been made at Portsmouth, Eng., on the subject of extending the Magnetic telegraph wires under water. The mode of insulating the wires is similar to that recommended in this paper a few weeks since. The length of the submerged wire is not specified, but we judge from the circumstances that it was not less than a mile; but the communications made were as perfectly free and powerful on the register as if the wire had been supported in the air. There is evidently no serious obstacle at present, to extending the telegraph across the Hudson river, at any point at which it would not be likely to be disturbed by the anchors of vessels.

THE TELEGRAPH.—On Friday at 2 P. M., says the Cayuga Tocsin, the operator at the station here was visited by a large ball of fire which landed on his table, followed by a report as if a musket had been fired in the room. This arose from a thunder storm, which seemed to occupy only the northern parts of the heavens, while the sun was shining, and in the southern sky there was but little indication of a storm.

A ROGUE PURSUED BY LIGHTNING.—A gentleman at Springseld, Mass., having lately been robbed of $200, communicated his loss and suspicions to the New York Police, by telegraph; and on the evening of the same day, officer Bloom sent word to the loser that the thief was arrested on board the New Haven boat, and the money recovered.

RAILROAD DEPOT REGULATIONS.—The following Rules and Regulations have been established by the Agent of the Boston and Lowell Railroad company, and should be adopted at every Railroad depot throughout the United States: "No Hacks or Cabs allowed on the premises of the Company, without the permission of the agent. Drivers are to remain outside the building at their carriages (except in stormy weather), until the arrival of the cars, when they will be admitted to stations provided for them, where they must remain in silence until called.

NINETEENTH ANNUAL FAIR OF THE AMERICAN INSTITUTE.—The Horticultural and Mechanical exhibition will be opened to the public at Niblo's Garden on the sixth day of October, at nine o'clock A. M. Plowing and spading matches will take place on Friday the 9th. Exhibition of pure blood and other cattle, horses, &c., at the corner of Twenty-third street and Fifth Avenue, on Wednesday and Thursday, the 14th and 15th of October.

THE NEW ELECTRIC GUN.—Some of the English papers contain a flaming account of the operation and effects of a new invention under this title, and which is represented to throw a thousand bullets per minute with great accuracy and force. We shall hazard the prediction, however, that it will turn out to be a sheer humbug, like three-fourths of the extravagant representations of great inventions with which the English papers abound.

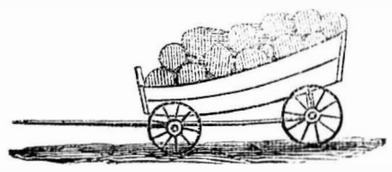
THE MORMON ARMY.—The captain of the steamer Tobacco Plant arrived with his boat at St. Louis, on the 12th inst., from Fort Leavenworth, and reports that one thousand Mormons, in addition to the five hundred called for, had come to the fort, in hopes of being enrolled in the service of the United States, to follow Gen. Kearny's expedition to Santa Fe and New Mexico.

Steamer Atlantic.

This new floating palace, unequalled in splendor and facilities of comfort and convenience, took her place on the Norwich line on Tuesday of last week. The hitherto unrivalled steamer Oregon, of the Stonington line, left her berth about one minute ahead of the Atlantic, and in passing the southern side of the battery, was about a quarter of a mile ahead and continued gaining for a few miles: but soon after passing Throg's Neck the Atlantic took the lead, and was two or three miles ahead on arriving at New London.

The Atlantic was built expressly for this line, under the superintendance of Capt. Dunstan, who is her commander. She is 320 feet long, 36 feet beam, and 64 feet breadth of deck. Her engines are of 1370 horse powers—the cylinder of 11 feet stroke, and 72 inches diameter. The cranks and shafts are of wrought iron, the former being eighteen and a half inches in diameter. The wheels are 36 feet in diameter, with a face of nine feet, and make 18 revolutions per minute. The style of finish and furniture, is superb beyond description. The upper saloon contains 60 state rooms, including six double rooms, all of which are splendidly furnished, and present to the traveller an air of convenience and luxurious comfort. The ladies saloon is gorgeously finished, with Axminster carpet, rosewood and satin-damask chairs, magnificent satin-damask curtains, gilded cornices, superb mirrors, &c. This saloon is large and airy, and contains *sixty berths* most admirably arranged, and in a style that cannot fail to please the most fastidious. The gentlemen's saloon contains 227 berths, very well furnished with the best of bedding, while by a new arrangement in hanging the drapery, each tier of berths can be at once converted into a secluded stateroom, while at the same time abundant ventilation is allowed. The berths are furnished with one hundred mattrasses, each of which is to be supplied with six six-inch air-tight cylinders, each capable of supporting two large men. These cylinders are so disposed that they can be reached at an instant's warning, and thus *sixteen hundred* infallible life-preservers are constantly at hand. The cost of this steamer, with machinery and furniture, is stated to be about $150,000.

Science of Mechanics.



THE BALANCE OF MECHANICAL LAWS.—As water naturally seeks its level, so does all mechanical force seek a corresponding resistance, and at the same time, produce a corresponding re-action. When a continuous and uniform force is applied to a steamboat, or other vessel, the motion of the vessel is accelerated, till the force applied is equalled by the resistance of water and the atmosphere. The force applied to a railroad train, finds its balance in the atmospheric resistance, and the friction of machinery. If a cannon ball, or any heavy article were let fall from the upper regions of the atmosphere, its velocity would be accelerated, till the atmospheric resistance is equal to its weight, or the attraction of gravitation. The force of the current of water in a river, is balanced by the resistance of the inequalities of its banks and bottom. No application of force can possibly produce an effect, greater than the expense of producing the original force. When force is applied to the elevation of a body, by projection, or ortherwise, in opposition to the force of gravitation, that body will contribute an equal force, by its descent—minus friction and atmosphereric resistance: and no ponderous body, by its descent, can by any possible application of this force, be made to elevate an equal weight to an equal height. No moving body is capable of producing an equal velocity, in another body of equal weight, by the force of its momentum: and no coiled spring, can, by its expansion, be made to bend, or coil another equal spring. To elevate a given weight, to a given height, requires the application of force, at least equal to that produced by the descent of an equal weight, an equal vertical distance: and no advantage can possibly be taken of any variation of the mode of applying the force, or the direction of the motion of the body, being thus elevated. It has been through the want of a knowledge of these facts, that many people have wasted years of their precious time, and thousands of dollars of their money or credit, in vain endeavors to discover the long sought "Perpetual Motion." Water mills have been constructed with machinery to be operated by water power, for the purpose of elevating to the upper reservoir, all the water expended in driving the machinery: but all have, of course, failed. It is a common thing, in some parts of the country, to see wagons, constructed with the hind part of the body elevated a foot or more above the axeltree, while the forward part is placed as low as possible, for the purpose of making the load,—especially, that of barrels of flour, and whiskey,—press hard against the forward end of the wagon body, that less power may be required to draw the load: and many wagoners suppose that a load thus adjusted, would move forward of its own accord, on level ground, were it not for the friction of the wheels, and resistance of the sand and mud on the road. And even this idea, is not more absurd, than those manifested by many practical engineers, in the construction and proportions of various parts of modern machinery: but as long as the machinery, like the wagons above mentioned, answers the general purposes for which it was intended, they are content to believe every part to be of the best construction, without the trouble of looking into the true laws of "mechanics," whereby to discover defects and superfluities, and promptly reject any propositions of improvement.

FIRE AT GORHAM, ME.—The principal business row, comprising seven or eight buildings at the central village, in Gorham, was destroyed by fire on the evening of the 15th inst.

Railroad Intelligence.

GREAT RAILROAD CONVENTION AT WOONSOCKET.—The friends and advocates of the new and straight railroad from New York to Boston, recently convened at Woonsocket for the purpose of concerting measures for the early construction of said road. More than five hundred delegates were present, representing numerous towns in Massachusetts, Rhode Island, and Connecticut, through which this road is to pass. Reports concerning the feasibility and prospects of this road were such as to leave no reasonable doubt that the project will be pushed forward with energy until a thoroughfare is opened, by which travellers may glide from this city to Boston in six hours.

THE MADISON AND INDIANAPOLIS Railroad Company have succeeded in negotiating in this city, a loan of $100,000 on favorable terms. This will enable the company to complete the road to Indianapolis by the first of March next.

THE MAD RIVER AND SANDUSKY Railroad will be completed to the Lake prior to March next, completing a route from Cincinnati to Boston that may be travelled in about 70 hours: the time that was required, twenty years ago, to travel from Boston to Albany. Travellers in Cincinnati, sleep on Lake Erie, and will be in Buffalo the next day. As this is the great natural inland route from New Orleans to New York and Boston, it requires no stretch of the imagination to show that it will be one of the greatest thoroughfares in the Union, for travel and business, of which Cincinnati will be naturally the central point.

CHICOPEE FALLS BRANCH R.R., is completed, and the cars are probably already running thereon.

NEW YORK AND HARLEM R.R.—An additional twenty-five miles of new road is expected to be ready for the cars in a few days, thus completing its extension to Somers. It is expected to reach Dover Plains, a distance of about ninety miles early next spring.

SOUTH SHORE RAILROAD.—A charter has been granted for a railroad to run along shore from Boston through Hingham to Duxbury, Mass.

CAPE COD BRANCH R.R.—Measures are in progress for the construction of a railroad to Barnstable, and perhaps to Orleans. The land is so favorable that the cost of the road is estimated at only $16,000 per mile.

WESTERN RAILROAD.—Such has been the increase of business on this road, as to astonish even its proprietors. For some weeks past the receipts have exceeded those of corresponding time last year by about four thousand dollars per week.

MURFREESBORO', N. C., July 22, 1846.

MR. PORTER—You will oblige your subscribers in this section of the United States, by informing us of the most approved method of keeping cellars dry which are disposed to be wet, or in which water will rise in rainy weather. Our cellar-floors are not commonly water-tight, and my object is to know how a cellar may be kept dry, without a water-tight floor or a blind ditch. Respectfully, W——.

ANSWER.—If it is the object of our correspondent to learn how to keep cellars dry *without* water-tight bottoms, we could give him a plan of a simple pump, to be stepped in a cavity in a corner of the cellar, and so arranged as to be put in operation by a weight whenever the water accumulates to the depth of three or four inches in the cavity;—the weight and machinery to be detached from its restraint by the rising of a buoy at the foot of the pump. But as the occasional winding up of the weight would occasion some trouble, we should rather recommend the use of the rosin, tar, or pitch, with which that country abounds, to be applied in rendering the cellars water-proof. The bottom of the cellar should be first smoothly overlaid with a mortar, consisting of one part lime, or two parts clay with ten parts of sand. This must be done in a dry season; and when this cement becomes hard, it should be overlaid with a heavy coat of warm pitch or tar, sufficiently dilute to be spread with a paint-brush; and this resinous coat may be immediately covered with dry sand, and the cellar may be used without any delay, whether the sand is covered with a plank floor or not. The walls also should be coated to some distance from the bottom, with the pitch, and covered with sand or coarse paper. If this coating is found to be inefficient, the loose sand may be swept off and an additional coat of the pitch or tar applied, and covered with sand as before. A Carolinean could hardly wish for a cheaper or better finish for cellars than this.

A MAJESTIC FLOWER.—We find in an exchange paper a description of a flowering tree which is found in the interior of Ceylon, and may be considered as a wonderful curiosity, excelling in beauty and grandeur all other plants in the vegetable kingdom. The body of the tree is sixty feet high and straight as a ship's mast, without limb or leaf; but supporting at the top an immense tuft of leaves, each of which is ten or twelve feet long. The stalks of these leaves clasp the body of the tree and incline outward, the long leavs bending over in a graceful curve. This vast crown of evergreen is of itself very grand: but when the tree is about fifty years old, there rises from its centre a cone several feet in height, which gradually enlarges until at length it bursts with a loud explosion, and a vast brilliant golden colored flower, twelve feet in diameter, appears over the elevated tuft of leaves as a gorgeous diadem on the head of this queen of the forest. The tree never blossoms but once, and does not long survive this grand display of magnificence.

CURIOUS TIME PIECE.—In one of the most fashionable resorts in Paris is a cannon loaded and primed, and so placed that the focus of a burning glass falls upon the powder precisely at 12 o'clock; of course every pleasant day the hour of noon is indicated by the firing of the canon. On every such day, a crowd gathers round it to watch the progress of the sun spot and the manner in which the motion of the earth on its axis is made to fire off artillery.

Inflammable Elements.

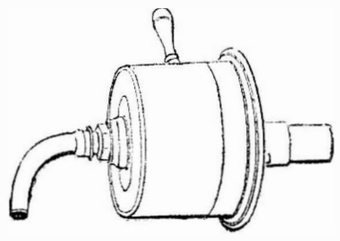
Some people suppose that a time will come when "the heavens will be on fire," while others ridicule the idea of such an event, supposing it to be inconsistent with the established laws of nature; yet there is one view of the subject which makes it appear miraculous that such an event has not occurred long ago. The fact has already become familiar with people of ordinary intelligence, that a mixture of hydrogen gas, with common atmospheric air, is highly inflammable, and will burn with a greater or less degree of violence according to the quantity of hydrogen in the compound. It is also well known that there is a constant emission of hydrogen from vegetation, and from the decomposition of various substances; and that this gas, being extremely light and buoyant, has a tendency to rise to the surface of the atmosphere. There is therefore no reason to doubt that immense quantities of this inflammable compound abound in the upper regions of the air, and that nothing more than a spark of electric fire would be required to envelope the world in flames. The only circumstance which has hitherto prevented such conflagration, is that the region of concentrative and excitable electricity is several miles below that of the inflammable air. Yet there are no defined laws or theory to show any security against the occurrence of an aerial conflagration at any moment.

THE SANTA FE EXPEDITION.—Intelligence from Fort Leavenworth to the 9th inst., has been received by way of St. Louis. An express had arrived from Gen. Kearney's camp, which was within 130 miles of Bent's Fort; all his forces progressing rapidly and comfortably. Rumors were circulating among the traders and the Mexicans, to the effect that Gen. Urrea was marching at the head of a large Mexican force for the protection of Santa Fee. It was not the intention of Gen. Kearney, to make any delay at Bent's, but to press forward toward Santa Fe.

THE PRICE OF A SOUTHERN NOSE.—A man has been sentenced to six months imprisonment in New Orleans, for attempting to bite off the nose of another man. The Judge told him that if he had been successful he would have had to pay a fine of $1,000

New Inventions.

HOUSE'S FILTER-FAUCET.



This excellent invention is calculated to filter and clarify the Croton and other aquaduct water, as it issues from the hydrant, and is so constructed and arranged that no exertion whatever is required to keep it in perpetual repair and good order. A filter of the best material is so arranged within the cylindrical chamber, that by turning the cylinder in one direction, one surface of the filter is presented to the current, and clarifies the water as it flows through: and when it becomes proper to cleanse the filter, the cylinder has only to be turned in the other direction, by which the internal current is reversed so as to flow through the filter in the opposite direction, thus readily cleansing the filter from all sediment and impurities, and the water will again flow in translucent purity. This first rate invention has been patented by Mr. C. House, of this city, and a specimen may be seen in operation at the Mechanics' Agency Rooms, No. 34 Ann street. Call and see it.

IMPROVEMENT IN SPINNING MACHINERY.—An application was filed at the Patent Office, on the 8th inst., by G. E. Marving, R. E. Peterson, and John Johnson, administrators of Alexander W. Scott, deceased, for a patent on certain improvements in machinery for spinning. The applicants claim the forming of the bobbin, or the tube carrying the bobbin, or the tube itself, or the tube and bobbin combined, in such a manner that the upper bearing at the upper end of the tube or bobbin shall be against the spindle, and the lower bearing laterally shall be against a fixture on or in the rail below, or against a lateral bearing on the rail itself: the bobbin or tube not having any other bearing except at its extremities. Also the placing of the roller in front of the drawing rollers, and revolving the same in the direction represented, and the use of the same in connection with spinning fibrous substances.

MILL FOR CRUSHING SUGAR CANE.—A patent has been applied for by Alfred Stillman, for an improved mill for this purpose. What he claims as his invention is the so combining of two sets of rollers as to present the cane, after it has been crushed by the first set of rollers, to the second set, in a body much thicker than when it left the first set, the more effectually to express the sacharine matter, and to prevent the second set of rollers from cutting through the mass.

WINDOW VENTILATOR.—We have seen a description of a new mode of ventilating windows by means of perforated panes of glass, to which is attached revolving discs, with perforations corresponding with those of the panes. This may be very ingenious, but we can not imagine many cases in which it would possess any considerable advantage over the ordinary method: that of raising or sliding the sash.

A CURIOUS TRAP.—Levi Kittinger has applied for a patent for a rat-trap which is operated by a weight, in such a manner that every rat that approaches is caught and safely secured while the trap sets itself for another: thus repeating the process until the weight is run down.

[Several other new inventions are unavoidably deferred.]

VARIETY

A train, consisting of twenty-seven long cars containing 2,500 persons, left Boston a few days since on the Boston and Maine railroad. The occasion was a pic-nic party excursion.

Nearly one hundred thousand emigrants from foreign ports have landed in this city since the first of March last, being an average of about five hundred and fifty per day.

Somebody says that an important secret has been carefully kept for some time past in Portland; but that it required all the ladies of the city to keep it, even with the aid of their husbands.

There is a place in New Jersey, called "the Peach Patch," which is expected to furnish thirty thousand baskets of peaches the present season. Peaches are exceedingly cheap in the market already.

The Messrs. Reybolds, who reside near Delaware city, have fifteen hundred acres of peach orchards, the produce of which is estimated at $100,000 for the present season. It is a great business.

A bill to restrict the sale of intoxicating liquors, has passed the House of Representatives in Maine, by a large majority. The temperance cause is strong in that State.

The number of persons discharged or released from their liabilities by the bankrupt law of '42 was 28,291; the aggregate of debts $440,934,615: cost of judicial proceedings $602,000.

Gen. Taylor save he will take his Christmas dinner at Monterey, if not in Mexico; and Gen. Paredes is said to excess a determination to dine on Christmas at Matamoros. We shall see.

Some of the English manufactories are making an elegant and durable printed fabric, from a kind of grass, which is found in abundance in China. The fibre is finer than that of flax.

The trains on the Erie Railroad were retarded a few days since. by armies of grasshoppers, which had taken possession of the rails, and rendered them too unctious for traction.

Mr. Wise made an interesting balloon ascension from West Chester, Pa., on the 8th inst. He sailed several miles at so moderate an altitude as to converse with the inhabitants by the way.

Travellers from the West have adopted the practice of engaging the best state rooms of the steamboats at Albany by means of the magnetic telegraph, prior to their arrival.

The Hutchinsons are said to have cleared thirty thousand dollars during their year's sojourn in England. Probably three thousand would be nearer the truth.

Three hundred barrels of American flour were received at Nottingham, Eng., from Liverpool, two or three weeks since, and was immediately sold at about eight dollars per barrel.

Gen. Taylor's army consists of about 18,000 men, now on their march to Monterey. The army commences its march at 3 A. M., and halts at 8 P. M., making about 15 miles per day.

The late Earl of Egremont distributed, during the last sixty years of his life, to benevolent objects, the immense sum of £1,200,000, or about $88,000 a year.

A boy in Portland, attempting to show what he could do, the other day, by standing on his head on the sill of an open window, lost his balance and fell and was killed.

There are said to be not less than four thousand visitors at Saratoga Springs; and the arrivals average about 250 per day. Albany is relieved for a season from blacklegs, pickpockets and swindlers.

Three principal railroads in England are to be amalgamated into one, to be called the "Great Northern Railway." The receipts of the whole amount to about 225,000 dollars per week.

During a recent camp-meeting, on the Eastern Shore, Md., a violent storm came on, which tore the tents in pieces and exposed the whole company to a drenching rain for nearly an hour.

A cigar manufactory, at Manilla, employs ten thousand girls. They are all native Indians, somewhat darker than the North American Indians. Think of their fair fingers, O ye smokers.

An immense flight of butterflies lately crossed the channel from France to England. Such were their extent and density that the sun was obscured as by a cloud, for several miles.

A dipper full of boiling water was lately thrown by the lady-cook of a canal boat at Albany, upon one of the crew, who had taken too much liberty. The fellow jumped overboard to cool.

The visitors to the cupola of the State House in Boston, are said to average from 300 to 400 per day. There is no other point in the United States which affords an equal view of splendid scenery.

An earthquake has occurred at Smyrna so violent as to destroy many buildings, overturn articles of furniture in the dwelling and throw the goods from the shelves of the shops.

The recent destruction of Laprairie, C. E., by fire, is almost wihout precedent: of 150 houses, there are said to be only fifteen left standing. The property destroyed is estimated at $250,000.

There is a scarcity of hands on the Illinois and Michigan canal. It is said that 2000 men would find employment at $1 per day by applying at the Canal office at Lockport.

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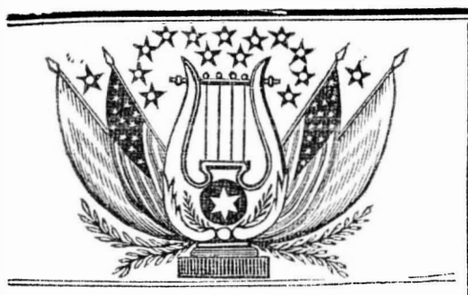


I Sigh Not.

I sigh not for wealth—let the miser enjoy
All the pleasure he finds in that pitiful toy;
Let him cherish his gold and his jewels with care,
For when riches have fled, his heart will despair.

Then the shrine where he knelt, no longer will cheer,
And his bosom will quake with madnesa and fear;
The idol he worshipp d, once vanish'd and gone,
E'en Hope will forsake him, and leave him forlorn.

I sigh not for Fame, for the world's applause
Is often bestowed for some slight trivial cause:
Thus, favor and friendship oft blazon a name
Unworthy of aught, save abhorrence and shame.

No! I sigh not for fame—it illumines man's way,
Like the meteor blaze in its brilliant array:—
Yet earth's pilgrim will find, though it glistens so bright
Its splendor will fade, will be shrouded in night.

I sigh not for these—give me Honor and Health,
And away with the phantoms of Fame and of Wealth.
If Contentment be mine, naught on earth can annoy,
For my heart will then bask in the sunshine of Joy.

With Faith for my beacon, and Hope for my guide,
My bark will glide on, smoothly over life's tide,
To a haven of peace, in yon Heaven above,
Where my spirit will rest, 'mid the regions of ve

The Present.

Oh slight not the present—the past is arrayed,
In a dim and indefinite mantle of shade;
Disturb not the calm of its mist-covered plains,
Where glide the pale ghosts of lost pleasures and pains.

The Future!—what mortal may pierce its thick cloud!
The future is wrapt in uncertainty's shroud;
Dark trials, keen cares from that shroud may arise,
Or its secrets may ne'er be disclosed to thine eyes.

The Present! oh! wish not its moments away;
A talisman dwells in the might of *to-day:*
Past seasons are buried, the future unknown,
But the bright, sunny present, at least, is thine own.

I seek not like vain thoughtless minstrels to sing,
Of the blossoms and warmth of life's beautiful spring;
I woo thee not lightly to while the fleet hours,
In numbering sunbeams and gathering flowers.

No! fain would I bid thee from knowledge implore
Each day some new treasure to add to thy store;
And gently some service or kindness impart,
To glad the worn fortune or soothe the sad heart.

Each day may thy home and its fondly loved ties
Acquire fresh attraction and worth in thine eyes;
Yet with strengthened devotion on God may'st thou call,
And feel that for Him, thou couldst part from them all.

Thus live and thou wilt not in weariness cast
Thy glance from the present to picture the past,
Nor marvel what earth's mystic future may be,
Since Heaven hath in store a bright future for thee.

The Ills we Leave Behind us.

Oh! what's the use of looking back
As o'er life's road we travel;
Or pausing for a moment to
Some mystery unravel:
The better way's to go ahead—
Let Fortune miss or find us,
And never cast a glance upon
The ills we leave behind us.

When sickness and sore toes combine
To make us sad and weary,
We ought to keep our spirits up,
Nor think that life is dreary;
But cast at once from off our souls
The chains of grief that bind us,
And bid a last farewell unto
The ills we leave behind us.

This world hath pleasure for us all,
As well as care and sorrow,
And though the skies may weep to-day,
They may wipe up to morrow;
Then why should we let present woes
Of former ones remind us?
They're past—they're gone—so let's forget
The ills we leave behind us.

Then let old Time remove the stones
Where all our griefs are covered,
And frighten Memory's bird away,
Which o'er them long has hovered;
For when within his fatal net
Grim Death has once entwined us,
We'll cease to think of present joys
And ills we leave behind us.

QUERY.—A Traveller on a journey, run short of provisions, but overtook two more, one of whom had five loaves of bread and the other three. He agreed that if they would put their bread together, and all three eat of it, he would pay for what he ate; they did so, and he gave them eight pieces of money of equal value. How should it be divided?"

ANSWER.—This can be answered without a mathematical process. Suppose the eight loaves be divided into twenty-four pieces: of these, one man furnished fifteen and the other only nine; each of the three gentlemen eats eight, wherefore one is entitled to receive pay for seven, and the other for only one. Thus eight pennies paid are divided accordingly, 7 and 1.

A TRUE SAILOR.—A son of Neptune, in speaking gratefully of a kindness rendered him by a stranger, naively remarked that he was so taken all-aback that his eyes pumped. Said he, "I can stand bad usage fram the whole world, for I have always been used to it, and there's a great deal in habit, you know; but when I am treated kindly by any one, it takes me all of a sudden, and then I take to salt water."

A visiting clergyman in Worcester, being requested to open the service by prayer, though not invited to preach, replied that *if his friend was going to do the mowing he might whet his own scythe.*

New Patents.

[From the Reports of the Commissioners of Patents, for 1846.]

SAW MILLS.—Four patents have been granted, within the year, for saw mills: three for ordinary sawing of boards, &c., and the fourth for sawing irregular shapes. The former are for improvements in the carriage and apparatus for setting the log or making the mill self-acting. Saw mills have long since been patented, which, after the log is placed upon the carriage, the various parts of the machine adjusted, and the gate, which admits the propelling power, opened, will saw the whole log into boards of any one thickness required, and close the gate and stop the machinery after the work is done. This being the case, it will be readily perceived that, so far as results are concerned, but little remains to be done for the self-acting saw mill.

The improvements patented as above mentioned, are for modifications in the means of affecting some one or more of the above operations; but no new effect has been produced. The mills above alluded to, are too complicated to be understood without drawings; and, although useful, a minute description of them would add but little to the information formerly extant upon this subject.

Letters patent for an improvement in mills for sawing irregular shapes, such as blanks for gun-stocks, &c., have been granted within the year, of which the following is an outline. An ordinary saw gate is arranged in the usual way for giving the up and down motion to the saw. The saw is connected to this gate by levers having their fulcra at the top and bottom of the gate, which levers extend both in front and behind the gate. The ends of the levers opposite to those jointed to the saw are connected to each other by a rod. The carriage carries the plank to be sawed towards the saws in the usual way. To this carriage grooved guides or patterns are attached, which are adapted to the shape to be sawed, and to each other. Through sliding blocks in these grooves the saws work. With this arrangement of parts, it will be perceived that, as the carriage advances, the guide and the block give the proper direction to the edge of the saw, and the levers permit the proper lateral motion. Thus, as the carriage moves on, the saw gate gives the saw its up and down motion, the levers allow the lateral motion, and the guide and block, through which the saw passes, give a proper direction to the saw. Any number of saws, similarly guided, may be used.

PLANING MACHINES.—Eight patents have been granted within the year for improvements in planing machines. One of them, however, was a mere reissue of the extended patent for the well known "Woodworth machine." This machine seems to comprehend all that is necessary for planing, tonguing, and grooving regular surfaces; and therefore inventors have not sought to improve it, but have confined themselves principally to the invention of such machines as may be substituted for it, or to those which perform other kinds of planing. The subject is vastly important, and no effort which ingenuity, prompted by interest, can make, has been spared in attempts to accomplish the grand object of producing a machine which, without infringing the patent, may be successfully substituted for the "Woodworth machine." Whether the machines patented infringe on pre-existing patents, or may successfully compete with them, is not my province to determine; it is sufficient for this office that they present points of novelty, and for these letters patent have been granted.

One of these machines is an improved mode of confining the cutter in its stock, which is effected by a conical screw inside of the ordinary device. Another is for improvements in various parts of an entire planing, tonguing, grooving, and beading machine, which cannot be understood without drawings and an elaborate description. Another feeds by endless belts of bars or slats, carried by rollers, and supported between the rollers by platforms on both sides of the board to be planed; and this apparatus is combined with a cutter, whose shaft is placed diagonally to the board, and, with a gang of adjustable saws, to divide the board into strips of any desired width.

When the lumber to be planed is very thin, such as shingles, &c., great inconvenience is likely to arise from its vibrations during the operation, which render it impossible to give the surface the desired smoothness. To remedy this evil the cutters have been made to work through a plate, the sides of the opening being so levelled as to render it as small as possible. Upon this plate the shingle to be planed is placed, and is of course pressed more uniformly and nearer to the point where the cutter is operating than would be possible with the rollers which are ordinarily used.

I will notice but one other patent for improvements in planing. This improvement is intended for planing, or rather smoothing, surfaces which are irregular in one direction—to wit, longitudinally—such as the legs of piano fortes, which are polygonal in their cross section. The ordinary cutter is used with sliding boxes on each side of the block to be smoothed, and attached to the carriage is a guiding groove, through which the cutter shaft passes, and by which, as the carriage moves on, the cutter is raised or depressed, according to the shape which the block is to receive. The different sides of the block are successively turned to the cutter to be smoothed.

Several patents have been granted within the year connected with boring, mortising, tenoning, and turning, but none of them present the strongly marked features of novelty which would entitle them to particular notice in this place. They are but slight modifications of previously existing machinery.

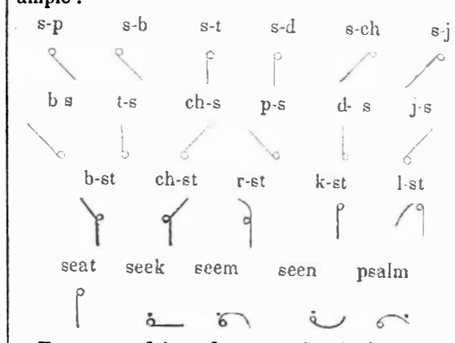
A VENERABLE PARTY.—A company of twelve persons took tea at the house of one of their friends' in New Bedford, last week, the aggregate ages of ten of whom amounted to seven hundred and eighty-nine years, as follows:—88 years and 8 months, 88 years and 5 months, 84 years 11 months, 84, 79, 77, 77, 71, 70, 69.

Smith's Celebrated Torpedo Electro-Magnetic Machines for sale at this office.

Phonography.

(Continued from No. 47.)

One of the modes of facilitating phonographic writing, is to express the consonant sounds of s and z by attaching a small circle to other consonant signs instead of making the regular signs of those letters. The only difference in the formation of these duplicate signs, is that the circle for z is made somewhat heavier than that of s. When these sounds precede those of other consonants, the circle signs are formed at the head of the other signs: and when preceded by other consonants, the circle is formed at the bottom; but when the s or z comes between two other consonants, the sign is formed between the other signs, as shown in the third example:—



By means of these few examples the learner will be able to form the signs of all the variety of combinations of s and z with other consonants, and with a little practice will write these combinations with facility.

For certain reasons which require no explanation we prefer to give but short lessons on this subject, and shall probably conclude the brief series in two or three weeks.

THE TURBINE WATER-WHEEL.—We find in several of our exchanges, a most absurd and ridiculous statement concerning this kind of wheel. It is represented to work two-fifths more power than the overshot wheel; and it is boldly stated that a wheel of this kind only two and a half feet in diameter, at Lowell, Mass., works thirty-five horse-powers! The fact is, that the turbine wheel is operated by the re-action of the water as it escapes from the centre of the wheel; and it has been often proved by both theory and practice, that the best re-action wheel can not give more than forty or fifty per cent. of the whole power of the water, nor more than two-thirds of that of an overshot wheel.

GOLD PENS.—We are informed that Joseph Hayden & Co., of Haydenville, Mass., have commenced the manufacture of diamond-pointed gold pens, of excellent quality. We are glad to hear that this kind of pen is coming into extensive use: for if they are preserved from accidental injury, by falling, their endless durability renders them the cheapest as well as the most free and excellent pens that can be used. We have used one of Bagley's pens about seven months, and consider the use of it to be worth at least twenty-five cents per month, which is equal to 120 per cent. per annum on the cost, while the pen continues good as new.

THE COLUMBIAN MAGAZINE.—The September No. is received, and is equal in all respects to any previous number of this justly celebrated work. It is embellished with three engravings of the first order, one of which—a fine mezzotinto by H. S. Sadd—represents Capt. May's charge on the Mexican battery. An excellent piece of New music—"Recall me not,"—is also presented. The reading matter is highly interesting, and all together the work is well worthy of the extensive patronage which it receives. Published by Israel Post, 140 Nassau street.

GRAHAM'S MAGAZINE, for September, contains three splendid engravings—a fine mezzotint representation of "Greeks at the Well," by W. E. Tucker:—a steel plate engraving of Mount Holyoke, with a view of the Connecticut River, by H. L. Fisk; and a plate of Paris fashions, in the usual excellent style. For further particulars, call at No. 98 Checnut st., Philadelphia, or at the Tribune Buildings, New York, and procure a copy.

SEAR'S NEW PICTORIAL MAGAZINE.—A double number for September and October is published, containing twenty or more curious and instructive stereotype prints, besides various other embellishments. The reading matter consists principally of historical and descriptive pieces, for the use of families, and the work is probably the cheapest in proportion to its size that is published in this city. Terms only $2,00 per annum. Published by R. Sears, No. 128 Nassau st.

WELLMAN'S ILLUSTRATED BOTANY.—Each number of this splendid work is embellished with three or more full colored engravings of choice flowers and curious plants; and contains a variety of botanical intelligence both interesting and useful. Published at 116 Nassau st. $3 per annum.

THE YOUTH'S CABINET.—The September number of this cheap and excellent periodical, contains an unusual variety of pictorial illustrations, besides music. The price of this Magazine is only one dollar a year and should be read by every family in the Union. Published by D. A. Woodworth 135 Nassau st.

WHITE MOUNTAIN BOOK.—This is the title of a neatly printed little work, giving a description of the scenery, facilities for sporting, &c. on the railroad and stage route between Boston and the White Mountains.

CURING A BAD TEMPER.—An exchange says, that if a married lady is of a cross, unhappy disposition, if she will take the trouble to wash her face and comb her hair, and arrange her dress, it will be almost impossible for to indulge in anger until her hair or dress becomes disarranged again.

A man lately applied to a druggist, at New Orleans, for four ounces of laudanum for the purpose of suicide; but was cheated with a decoction of rhubarb which made him very sick, but didn't kill him.

Geological Gleanings in Mississippi.

(Concluded.)

A few teeth of the Tapier, and of other minor, extinct, or unknown animals, have also been obtained in the same locality as the before-mentioned.

Near Jackson, on the bank of Pearl river, the remains of a huge Saurian, (or, Cetacean?) a marine monster of the lizard or serpent form, was found a few years since by a gentleman who had the good taste to preserve, and the liberality to bestow it upon the writer. The joints of the larger vertebra, of which many were obtained, measure about six inches in diameter, and ten or twelve in length. The largest deprived of its spinous processes, or the bones which form the arch over the spinal marrow, weighs twenty-five pounds. Very few skeletons of this reptile had as yet been found, and, so far, it is believed to be confined to thts continent. It has been identified by the late Dr. Harlan, the distinguished American Comparative Anatomist, with the Basilosaurus, first described by him from specimens obtained by the late Judge Bryon the Ouachitta River.

A skeleton, found in place in the Eocine, or oldest member of the Tertrary formation in Alabama, not only confirms the conjectures as to its length, which is proved to have been at least 100 feet, but determines its geological position in this State beyond question, which, if further proof were necessary, is found in the identity of the fossils obtained at the lime quarry, mentioned as being near Jackson, and within a mile or two of these remains, with those in Alabama, as described by Mr. Conrad, fossil fish a foot or more in length, sharks' teeth, fish scales, (nummulites?) spatangus and many varieties of marine shells, some of extinct species, being found in this quarry. One of the vertebra of the Basilasaurais, was also discovered in an excavation in the city of Jackson.

Indicating a formation of a still earlier period, several vertebra of the Mossasaurus, were found in the indurated marl, or white lime stone, near Macon in Noxubbee county, in digging a cistern. These have the characteristic ball and socket structure, and are in the most perfect preservation possible, being mineralized, the cellular tissue consolidated and the surface partially incrusted with sulphuret of iron. Another vertebra obtained from a cistern in the public square in Macon, Noxubbee county, at the depth of about thirty feet from the surface of the ground, and fifteen feet within the rock is completely enveloped in the mineral, the pyrrites presenting a brilliant and chrystaline appearance.

Other bones, together with Turtle shell, compressed and flattened, were obtained from about the same depth and in similar condition.

Among the fossils of Vicksburg may be enumerated an arca, pecten, and venus, of the bivalves, as well as the following univalves, buccinum, dentalium, fasciolaria, murex, mitre, natica, oliva, solarium, treton, tunetella, &c. This list may be extended to more than fifty varieties.

The drift or diluvial deposites of the Mississippi Bluff range has furnished, among the transported detrutus of other climes, many fossils associated with some of the inferior gems, which excited in no ordinary degree the attention of intelligent visitors from abroad. These fossils exist in a very perfect and durable material, being generally silecified, none other being capable of bearing the attrition to which they have been subjected in the distant transportation which has brought them so far to the south, and to which they owe much of their polish and beauty.

Besides the trunks of petrified wood instanced at the White Cliffs and on Coles Creek, several others occur more in the interior of a very interesting character, from the circumstances in which they are found. These lie on the surface, on elevated ground, remote from water, and nearly the entire tree in place, as if it had fallen where it grew. In one specimen found near the head water of the Big Black, and examined carefully by the writer, the bark was converted into an aggregate mass of handsome small brown chrystals, the bark being in some places entirely detached from the wood, and chrystalized on both surfaces.

Many forests exist in relation to these fossil woods, which must tend to modify materially the received theory as to the process of petrifaction. But recently it was deemed heresy to doubt that all those petrified blocks of wood, found here, were transported from other regions, in the character of boulders. That such may be the fact in relation to many of them is not questioned, for there is sufficient evidence that an agency has, at some time, been in operation entirely adequate to the transportation of even larger masses. But others occur, nearly entire trees, under circumstances that render it at least as certain that this process, by whatever chemical combination or action produced, or in what period effected, long or short, has taken place on the spot where they are found.

Other smaller, water-worn specimens belonging unquestionably to the drift, are found in some of the streams, and a rare collection has been made of those embracing, such as palms, and other indigenous plants, and comprising every variety of silicious petrefaction.

All the modifications of quartz, including cornelian, calcedony, jasper and agate, enter into their composition and render many of them exceedingly interesting and beautiful.

Many other silurian fossils, such as agalized corals, or zoophytes, in considerable variety, crinoidea, oolite, &c., one common to the drift or diluvium as revealed in the beds of our streams, which also affords fine specimens of jasper and quartz agates, chiefly of the fortification, landscape, and ribbon varieties, as well as sards, calcedony, cornelians and onyx.

B. L. C. W.

WASHINGTON, Miss.

A large quantity of wood having been piled upon the upper floor of a large school-house, in Lynn, Mass., the floor recently gave way and buried the teacher and about forty scholars. Severa were injured, but no lives lost.

Here is a Question.

Is an interest—a *present* interest in the favor of Christ, actually worth as much as an extensive fortune in this world? To this question, we doubt not, that every professor of religion would readily answer—not from his heart but with his lips—in the affirmative. This being admitted, a simple observer would be led to the conclusion that a permanent interest in Christ was very easily secured, and that little or no exertion is required to retain it, while the grantees and inheriters thereof have nothing to do but to give their whole attention to the pursuit of the wealth and honors of the world. And that they are moreover furnished with a new gospel, or a set of laws and rules altogether different from the common printed gospel as furnished by the evangelists: for, instead of forsaking all things for the sake of Christ, they are only required to observe a few fashionable rules in *acquiring* all things, honors and pleasures as well as riches of this world. Such people must be greatly favored to have nothing to do but to avoid stealing, and such other acts of gross immorality as would subject them to imprisonment as well as to dishonor among men; and to rest from their secular avocations one day in each week,—contribute a small part of their gains to erect preaching houses, and support in affluence a few clerical dignitaries; and perhaps conform to the custom of society, by reading a chapter in the bible and repeating a prayer once or twice a day in the presence of their families;—and still enjoy the constant favor of God and full assurance of salvation, while thousands of poor, hard-laboring and severely afflicted people, who, with tattered garments, daily pass the dwellings of the righteous, but are deprived by poverty from the privilege of joining the churches, or even of hearing the preaching, are doomed to everlasting wretchedness, in addition to their sufferings in this world. Are these things so? Will the poor ignorant and perhaps profane laborer be condemned in the judgment, while the rich and proud christian professor is commended and justified, and rewarded with everlasting honor? We leave this question to be answered by the scriptures of truth, while we return to consider the previous question. This must be answered in the affirmative: but it is expressly declared in the scriptures, that no man *can* serve God and mammon at the same time: and that "where your treasure is, there will your heart be also:" "Lay *not* up for yourselves treasures upon the earth:" "sell that ye have and give alms:" "he that hath two coats let him impart to him that hath none, and he that hath meat, let him do likewise.' The excellence of Christ is well worth the sacrifice of all the wealth, reputation and luxuries of the world; and all the professions, church-membership, attendance on public worship and church ceremonies, will prove worse than vanity to all those who neglect obedience to the more essential, though now unpopular injunctions of the gospel.

THE CHRISTIAN LIFE.—Religion is the only path that leads to solid peace. On this path a light is shed from above, to cheer the traveller through his rough and thorny way, and the favor of the Almighty Jehovah will never leave those who enter upon this road to peace. He has promised to be their guide and support, and his promises are as firm as the everlasting hills, which cannot be moved. Would you see the truest picture of happiness this life affords, look at the Christian. He is not exempt from trials incident to this mortal state, but amidst his troubles he can look to his heavenly Father, and find a friend and comforter, able and willing to carry him through them all. If he is prosperous, he partakes of the bounty of his Maker, constantly reverting with a grateful heart to the giver of every good and perfect gift, and receives pleasure in imparting to the needy and destitute. He envies not the wealthy and fashionable circle—he seeks not the pleasure of the world, for they are too trifling to afford him any joy. He has in prospect a crown of glory which he would not exchange for millions of the world—he has a hope which is an anchor to his soul, sure and steadfast, which spreads a peaceful serenity over all the changes of this life, and renders him the happiest of men. It is an estimable privilege that mortals possess of travelling this path, for whosoever will may enter therein, and find peace and safety. This life is a state of probation preparatory to an endless existence, and though but the beginning of existence, it fixes our state for eternity. Our notions here are registered in the book of heaven, and unless they are those which savor of godliness, we cannot be prepared to enjoy God in the world to come.—*Selected.*

THE FAULTS OF CHILDREN.—It may be well to drop a hint against the folly and impropriety of making the faults of your children the subject of conversation with other people. Nothing can be more unkind and injudicious. If you wish your children to reform and improve, you must throw a shield round their character. However foolishly they may have acted, let them see that you are anxious to keep open the way for their return to propriety and respectability. Many a youth has been hardened and driven to reckless despair by being taunting upbraided, before strangers, with misconduct which never needed to be, and therefore never ought to have been, known beyond his own family. On the other hand, many a wanderer has been encouraged to return by observing, in those most injured by his follies, a general readiness cordially to reinstate him in their esteem, and to shield his reputation from the reproaches of others. It is not wise for a mother either to boast of the excellence, or to publish the faults of her children—but rather to ponder them in the heart; to mention them only at the throne of mercy, there to implore grace to confirm what is right and correct what is wrong, and in all things to make plain before her face the way of her own present duty in reference to them.—*Ibi*

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Pat and the Traveller.

A traveller one day chanced to meet a brother Pat,
And said "tell me I pray whose fine mansion is that,"
"Arrah honey,' said Pat, while scratching his head,
"One Mr. Fitzwilliam lives there, but now he's dead."
The traveller hearing this, said to Pat, as he sighed,
"I pray thee, how long since the owner has died?"
"Och, yer honor," replied Pat, in very great sorrow,
"He'd be dead just three weeks had he lived till tomorrow.'
The traveller looked solemn at this information,
And trudged on his journey in deep meditation

Hatters are said to have been very *furious* fellows, notwithstanding their *nutra*-lity, whenever they have *felt* an inclination for a good *nap*.

John M. Clayton has been nominated as a candidate for the Presidency by a paper entitled the *Blue Hen's Chicken*. He will find it rather hard *scratching* in that ground.

SMITH'S NEWLY INVENTED
TORPEDO,
OR ELECTRO MAGNETIC MACHINE.

THIS MACHINE is undoubtedly the most powerful and efficacious of any in use. As an agent for medical purposes is truly wonderful, while as a curious Electrical Machine it should be in the possession of every one. To be had wholesale and retail at this office, 128 Fulton street, where they may be seen every day and evening in operation. The public are invited to call and examine. aug27

Engravings.

A LARGE LOT OF VALUABLE ENGRAVINGS (illustrative of new mechanical inventions,)—for sale cheap, at this office.

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34 Ann street, New York.

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For Manufacturers, Merchants, Farmers, Mechanics, and Professional Men to procure situations for Clerks, Mechanics, Apprentices, Teachers, Farmers and Gardners. Also, to purchase and sell Machinery, Personal Property, and Real Estate, particularly for manufacturing purposes

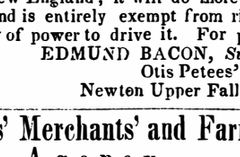
Persons well acquainted with the business, wants, and customs of the city and country will be connected with the Office The utmost pains will be taken to obtain and furnish all required information, and to conduct the business on strictly correct principles

This undertaking has received the approbation of our most benevolent and intelligent citizens, as well worthy the patronage of all classes of business men

REFERENCES: H Meigs and others, of the American Institute. Prof Mapes President, and C L Barritt, Actuary, of the Mechanics' Institute.

Communications, post paid, to S. FLEET.
August 12—1m

THE TORPEDO ELECRO-MAGNETIC MACHINE.



The subscriber takes this opportunity of apprising the public that, at the last Fair held by the American Institute, he obtained the premium and medal for the best Electro-galvanic machine on exhibition. Since then he has made a new and very important discovery in these by which he can give out the pure magnetic fluid, or the primary current. Its efficacy is truly wonderful.
SAMUEL B. SMITH,
Inventor and manufacturer, 297 1-2 Broadway, left de going up. 43to52*

STATE OF NEW YORK, SECRETARY'S OFFICE,
ALBANY, July 24, 1846.

TO the Sheriff of the City and County of New York: Sir—Notice is hereby given, that at the next General Election, to be held on the Tuesday succeeding the first Monday of November next, the following officers are to be elected, to wit:—A Governor and Lieutenant Governor of this State. Two Canal Commissioners, to supply the places of Jonas Earll, junior, and Stephen Clark, whose terms of service will expire on the last day of December next. A Senator for the First Senatorial District, to supply the vacancy which will accrue by the expiration of the term of service of John A. Lott on the last day of December next. A Representative in the 30th Congress of the United States, for the Third Congressional District, consisting of the 1st, 2d, 3d, 4th and 5th Wards of the City of New York. Also, a Representative in the said Congress for the Fourth Congressional District, consisting of the 6th, 7th, 10th and 13th Wards of said City. Also a Representative in the said Congress for the Fifth Congressional District, consisting of the 8th, 9th and 14th Wards of said City. And also a Representative in the said Congress for the Sixth Congressional District, consisting of the 11th, 12th, 15th, 16th, 17th and 18th Wards of said City.

Also the following officers for the said County, to wit: 16 Members of Assembly, a Sheriff in the place of William Jones, whose term of service will expire on the last day of December next. A County Clerk in the place of James Conner, whose term of service will expire on the last day of December next, and a Coroner in the place of Edmund G. Rawson whose term of service will expire on the last day of December next.

Yours, respectfully,
N. S. BENTON, Secretary of State.

Sheriff's Office, New York; August 3d, 1846.

The above is published pursuant to the notice of the Secretary of State and the requirements of the statute in such case made and provided for. WM. JONES,
Sheriff of the City and County of New York.

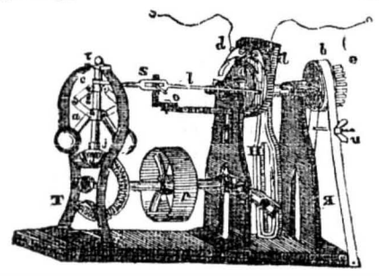
☞ All the public newspapers in the County will publish the above once in each week until election, and then hand in their bills for advertising the same, so that they may be laid before the Board of Supervisors, and passed for payment.

See Revised Statutes, vol. 1, chap. vi. title 3d, article 3d—part 1st, page 140. aug 18 tE.

Water-power for Sale.

A Rare Chance for a Manufacturer.

The Water-mills at the head of tide-water, in the pleasant village of East Haven, Ct., and within two miles of New Haven harbor, on an unfailing stream of ten or twelve horse-powers, are for sale at a very moderate price, and on liberal terms of payment. This site is susceptible of a considerable additional power, by increasing the head of water, if required: and its location is such that the cost of transportation of goods to the steamboat landing is merely trifling. A part of the price may remain on mortgage two or three years, if required. For further particulars enquire of Edwin Street, East Haven, or Robert Atwater, 199 Pearl st. N. Y. 34tf



SCHOLFIELD'S CELEBRATED
Improved Patent Regulator.

N. CHOLFIELD, Norwich, Conn., continues to manufacture, and keeps constantly on hand, his Improved Patent Regulators, for water-wheels and steam engines; he makes five different sizes, indicated by numbers comencing at the largest size, which is called No. 1, &c..

They are built in a neat and compact form, and printed directions accompany each machine, which will enable any mechanic to put them in operation; as a general rule the different numbers are adapted to different sized wheels, as follows;

For over-shot or breast wheels, 3 feet buckets, No. 5; 5 or 6 feet buckets, No. 4; 6 to 10 feet buckets, No. 3; 8 to 15 feet buckets, No. 2; 12 to 20 ft. buckets, No. 1; greater than 20 feet, No. 1 extra.

The following agencies have been established for the sale of these machines:—Jones, Denney & Ward, Boston; V. J. Bates & Co., Providence, R. S; Charles Schenck, New York city; D. Wight & Lon, Troy, N. Y.; R.M. Vansickler, Albany, N.Y. S.C. Bemis, Springfield, Mass.; Denslow & Beach; Hartford, Conn.; Joseph B. Hughes, Philadelphia; Wells Chase, and Towner Dunlap & Co.; Baltimore.

N. Scholfield also builds to order Bacon's Improved Pickers, a superior article for cotton or wool.

☞ N. S. has removed to the large new and commodious brick shop (with steam power) a short distance below his old stand; and is now prepared to furnish Cotton and Woollen Machinery of every description; Steam Engines, Turning Engines, Lathes, Shop Tools, or any other article in his line of business, of as good quality, and on as fair terms as any other well appointed establishment in the country.

Norwich Conn., Aug. 18. 19 eowtf.

BALLARD'S
IMPROVED JACK SCREW
PATENTED.

THE advantage of this Jack Screw for Railroads, Steam-Boiler Builders, and for other purposes, are superior to any other similar machine.

The improvement consists in being able to use either end of the screw, as occasion requires.

It is capable of raising the heaviest Locomotive with ease, being portable, strong, and powerful, and not likely to get out of order.

Many Railroad Companies and Boiler Makers have them in use, by whom they are highly recommended.

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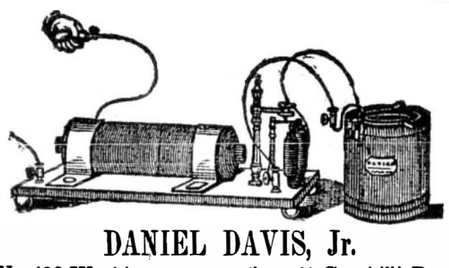

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Iron works of all descriptions, erected upon the most improved plans; steam or water powers.

Drawings, plans and estimates made for buildings, furnaces and machinery, and contracts for the whole or any part thereof taken and executed with promptness and despatch; and will also give his personal superintendence in the erection of iron works of all kinds, such as Rolling mills, blast furnaces—of hot and cold blasts—anthricite, bituminous, and charcoal or wood furnaces, forges, trip-hammers; iron, brass, and bell foundry, pudling and heating furnaees, air cupolo chaffery and refinery, or let out furnaces.

N.B.—All letters directed, post-paid, to S. B. MERKEL, Founder-machinist, millwright, draughtsman and Engineer, Philadelphia. Pa. 22tf

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N. B. Work shipped to any part of the country
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AT this Establishment may be seen the largest assortment of Shirts, Bosoms, Collars, &c., to be found in the city—all of our own manufacture, in Troy, which we offer to dealers and citizens in general, 25 per cent. below city prices. The above goods have won too high praise to need any puffing from us. It is sufficient to say that we are now patronized by all the principal dealers in the city, and the above goods have been generally approved of throughout the country, for being well made and for cheapness.

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Sole Agents, for this city, for J. A. Fay's patent Mortising Machine. 42tf

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TOOL STORE,

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Natural and mineral teeth inserted from	$1 to 3 50
Decayed teeth filled with white cement, and warranted useful for mastication,	50
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References can be had from several hundred families, also to the medical faculty of the city. 10tf

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The objects of this agency are more particularly to aid and assist Inventors and Patentees in effecting sales of their inventions and of goods and wares made therewith—and also for the sale and transfer of Patent Rights.

Arrangements have been made with a lawyer familiar with the Patent Laws, who will attend to the legal branch of the business upon reasonable terms. Satisfactory references will be given. Applications may be made to the undersigned personally, or by letter, *post-paid.*
SAMUEL C. HILLS,
45 2d6-x *General Patent Agent.*

Patent Agency at Washington.
ZENAS C. ROBBINS.
Mechanical Engineer and Agent for procuring PATENTS,

Will prepare the necessary Drawings and papers for applicants for patents, and transact all other business in the line of his profession at the Patent Office. He can be consulted on all questions relating to the patent laws and decisions in the United States or Europe. Persons at a distance desirous of having examinations made at the Patent Office, prior to making application for a patent, may forward (post paid, enclosing a fee of five dollars,) a clear statement of their case, when immediate attention will be given to it, and all the information that could be obtained by a visit of the applicant in person, will be promptly communicated.

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Office on F street, between 7th and 8th sts., opposite the east wing of the Patent Office.

He has the honor of referring, by permission, to Hon. Edmund Burke, Commissioner of Patents; Hon. H. L. Ellsworth, late ditto: Judge Cranch, Washington, D.C.; Hon. R. Choate, Massachusetts, U. S. Senator; Capt. H. M. Shreve, Missouri; H. Knowles, Machinist, Patent Office. april 2.3m*

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Charges moderate. A reasonable discount made for cash. 22tf

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On the most extensive scale.

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Patent Agency

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